

SEQUENCE LISTING

<110> AGUERA, Michelle

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**<120> Modulation of Ulip/CRMP activity for the prevention or
treatment of myelin disorders**

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<151> 2000-11-09

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<170> PatentIn Ver. 2.1

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Met Thr Tyr Lys Asp Leu Tyr Met Leu Arg Asp Ser Glu Leu Tyr Gln

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Glu Asn Gly Glu Leu Val Ala Glu Gly Ala Lys Glu Ala Leu Asp Leu

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Ser His Ala Ala Ala Tyr Val Thr Val Pro Pro Leu Arg Leu Asp Thr

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Asn Thr Ser Thr Tyr Leu Met Ser Leu Leu Ala Asn Asp Thr Leu Asn

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Leu Asn Leu Tyr Pro Arg Lys Gly Arg Ile Ile Pro Gly Ala Asp Ala

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Asp Val Val Val Trp Asp Pro Glu Ala Thr Lys Thr Ile Ser Ala Ser

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His Gly Val Pro Leu Val Thr Ile Ser Arg Gly Arg Val Val Tyr Glu

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Asn Gly Val Phe Met Cys Ala Glu Gly Thr Gly Lys Phe Cys Pro Leu

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Arg Ser Phe Pro Asp Thr Val Tyr Lys Lys Leu Val Gln Arg Glu Lys

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Thr Leu Lys Val Arg Gly Val Asp Arg Thr Pro Tyr Leu Gly Asp Val

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Ala Val Val Val His Pro Gly Lys Lys Glu Met Gly Thr Pro Leu Ala

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His Glu Ser Ser Phe Ser Leu Ser Gly Ser Gln Ile Asp Asp His Val

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His Tyr Trp Ser Lys Asn Trp Ala Lys Ala Ala Ala Phe Val Thr Ser
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Val Lys Thr Ile Ser Ala Lys Thr His Asn Ser Ser Leu Glu Tyr Asn
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Val Ile Val Pro Gly Gly Val Lys Thr Ile Glu Ala Asn Gly Lys Met

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Val Ile Pro Gly Gly Ile Asp Val His Thr His Phe Gln Met Pro Tyr

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Lys Gly Met Thr Thr Val Asp Asp Phe Phe Gln Gly Thr Lys Ala Ala

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Glu Ser Ser Leu Thr Glu Ala Tyr Glu Lys Trp Arg Glu Trp Ala Asp

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Gly Lys Ser Cys Cys Asp Tyr Ala Leu His Val Asp Ile Ala His Trp

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Val Asn Ser Phe Met Val Tyr Met Ala Tyr Lys Asp Leu Tyr Gln Val

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Gln Thr Arg Met Leu Glu Met Gly Ile Thr Gly Pro Glu Gly His Val
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20 Val Val Phe Gly Glu Pro Ile Thr Ala Ser Leu Gly Ile Asp Gly Thr
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His Tyr Trp Ser Lys Asn Trp Ala Lys Ala Ala Phe Val Thr Ser
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Ser Thr Ala Gln Lys Ala Ile Gly Lys Asp Asn Phe Thr Ala Ile Pro
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Gly Thr Pro Ala Gly Ser Ala Arg Gly Ser Pro Thr Arg Pro Asn Pro
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2842

09986632-10901

<210> 8

<211> 572

<212> PRT

<213> Homo sapiens

<400> 8

Met Ser Tyr Gln Gly Lys Lys Ser Ile Pro His Ile Thr Ser Asp Arg

1 5 10 15

Leu Leu Ile Lys Gly Gly Arg Ile Ile Asn Asp Asp Gln Ser Leu Tyr

20 25 30

Ala Asp Val Tyr Leu Glu Asp Gly Leu Ile Lys Gln Ile Gly Glu Asn

35 40 45

Leu Ile Val Pro Gly Gly Val Lys Thr Ile Glu Ala Asn Gly Arg Met

50 55 60

Val Ile Pro Gly Gly Ile Asp Val Asn Thr Tyr Leu Gln Lys Pro Ser

65 70 75 80

Gln Gly Met Thr Ala Ala Asp Asp Phe Phe Gln Gly Thr Arg Ala Ala

85 90 95

Leu Val Gly Gly Thr Thr Met Ile Ile Asp His Val Val Pro Glu Pro

100 105 110

Gly Ser Ser Leu Leu Thr Ser Phe Glu Lys Trp His Glu Ala Ala Asp

115 120 125

Thr Lys Ser Cys Cys Asp Tyr Ser Leu His Val Asp Ile Thr Ser Trp

T0607T 2398660

130 135 140

Tyr Asp Gly Val Arg Glu Glu Leu Glu Val Leu Val Gln Asp Lys Gly

145 150 155 160

5

Val Asn Ser Phe Gln Val Tyr Met Ala Tyr Lys Asp Val Tyr Gln Met

165 170 175

Ser Asp Ser Gln Leu Tyr Glu Ala Phe Thr Phe Leu Lys Gly Leu Gly

10

180 185 190

Ala Val Ile Leu Val His Ala Glu Asn Gly Asp Leu Ile Ala Gln Glu

195 200 205

15

Gln Lys Arg Ile Leu Glu Met Gly Ile Thr Gly Pro Glu Gly His Ala

210 215 220

Leu Ser Arg Pro Glu Glu Leu Glu Ala Glu Ala Val Phe Arg Ala Ile

225 230 235 240

20

Thr Ile Ala Gly Arg Ile Asn Cys Pro Val Tyr Ile Thr Lys Val Met

245 250 255

Ser Lys Ser Ala Ala Asp Ile Ile Ala Leu Ala Arg Lys Lys Gly Pro

25

260 265 270

Leu Val Phe Gly Glu Pro Ile Ala Ala Ser Leu Gly Thr Asp Gly Thr

275 280 285

30

His Tyr Trp Ser Lys Asn Trp Ala Lys Ala Ala Ala Phe Val Thr Ser

290 295 300

Pro Pro Leu Ser Pro Asp Pro Thr Thr Pro Asp Tyr Leu Thr Ser Leu

09986632 110901
T0607 2398660

30

485

490

495

Gly Met Tyr Asp Gly Pro Val Tyr Glu Val Pro Ala Thr Pro Lys Tyr

500

505

510

5

Ala Thr Pro Ala Pro Ser Ala Lys Ser Ser Pro Ser Lys His Gln Pro

515

520

525

Pro Pro Ile Arg Asn Leu His Gln Ser Asn Phe Ser Leu Ser Gly Ala

10

530

535

540

Gln Ile Asp Asp Asn Asn Pro Arg Arg Thr Gly His Arg Ile Val Ala

545

550

555

560

Pro Pro Gly Gly Arg Ser Asn Ile Thr Ser Leu Gly

15

565

570

20

<210> 9

<211> 1690

<212> DNA

<213> Homo sapiens

25

<400> 9

gccgcccta ccagagaccc ccaggagcag gatgtccttc cagggcaaga aaagcatccc 60

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cttttacgct gatgtgcacg tggaagatgg ctgtataaaa caaatcggag aaaacctcat 180

cgtccctggg ggcatacaaga ccattgacgc ccacggcctg atggtccttc ctggtggcgt 240

30

tgacgtccac acaaggctgc agatgcctgt cctgggcatg acaccggctg acgacttctg 300

tcagggcacc aaggcagcgc tagcaggagg aaccaccatg atcttgacc acgtcttccc 360

cgacacgggt gtgagcctgc tggcggccta cgagcagtgg cgggagcggg cggacagcgc 420

ggcctgctgc gactactccc tgcacgtgga catcacccga tggcatgaga gcatcaagga 480

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 gcggttgctg gagctcggca tcaactggccc cgaggggccac gtgctcagcc accccgagga 720
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<210> 10

<211> 572

<212> PRT

<213> Homo sapiens

<400> 10

Met Ser Phe Gln Gly Lys Lys Ser Ile Pro Arg Ile Thr Ser Asp Arg

1 5 10 15

Leu Leu Ile Arg Gly Gly Arg Ile Val Asn Asp Asp Gln Ser Phe Tyr

20 25 30

Ala Asp Val His Val Glu Asp Gly Leu Ile Lys Gln Ile Gly Glu Asn

35 40 45

5

Leu Ile Val Pro Gly Gly Ile His Thr Ile Asp Ala His Gly Leu Met

50 55 60

Val Leu Pro Gly Gly Val Asp Val His Thr Arg Leu Gln Met Pro Val

10

65 70 75 80

Leu Gly Met Thr Pro Ala Asp Asp Phe Cys Gln Gly Thr Lys Ala Ala

85 90 95

15

Leu Ala Gly Gly Thr Thr Met Ile Leu Asp His Val Phe Pro Asp Thr

100 105 110

Gly Val Ser Leu Leu Ala Ala Tyr Glu Gln Trp Arg Glu Arg Ala Asp

115 120 125

20

Ser Ala Ala Cys Cys Asp Tyr Ser Leu His Val Asp Ile Thr Arg Trp

130 135 140

His Glu Ser Ile Lys Glu Glu Leu Glu Ala Leu Val Lys Glu Lys Gly

25

145 150 155 160

Val Asn Ser Phe Leu Val Phe Met Ala Tyr Lys Asp Arg Cys Gln Cys

165 170 175

30

Ser Asp Ser Gln Met Tyr Glu Ile Phe Ser Ile Ile Arg Asp Leu Gly

180 185 190

Ala Leu Ala Gln Val His Ala Glu Asn Gly Asp Ile Val Glu Glu Glu

00586632-110904

195 200 205

Gln Lys Arg Leu Leu Glu Leu Gly Ile Thr Gly Pro Glu Gly His Val

210 215 220

5

Leu Ser His Pro Glu Glu Val Glu Ala Glu Ala Val Tyr Arg Ala Val

225 230 235 240

Thr Ile Ala Lys Gln Ala Asn Cys Pro Leu Tyr Val Thr Lys Val Met

10

245 250 255

Ser Lys Gly Ala Ala Asp Ala Ile Ala Gln Ala Lys Arg Arg Gly Val

260 265 270

15

Val Val Phe Gly Glu Pro Ile Thr Ala Ser Leu Gly Thr Asp Gly Ser

275 280 285

His Tyr Trp Ser Lys Asn Trp Ala Lys Ala Ala Ala Phe Val Thr Ser

290 295 300

20

Pro Pro Val Asn Pro Asp Pro Thr Thr Ala Asp His Leu Thr Cys Leu

305 310 315 320

Leu Ser Ser Gly Asp Leu Gln Val Thr Gly Ser Ala His Cys Thr Phe

25

325 330 335

Thr Thr Ala Gln Lys Ala Val Gly Lys Asp Asn Phe Ala Leu Ile Pro

340 345 350

30

Glu Gly Thr Asn Gly Ile Glu Glu Arg Met Ser Met Val Trp Glu Lys

355 360 365

Cys Val Ala Ser Gly Lys Met Asp Glu Asn Glu Phe Val Ala Val Thr

09985532-110901

370 375 380

Ser Thr Asn Ala Ala Lys Ile Phe Asn Phe Tyr Pro Arg Lys Gly Arg

385 390 395 400

5

Val Ala Val Gly Ser Asp Ala Asp Leu Val Ile Trp Asn Pro Lys Ala

405 410 415

Thr Lys Ile Ile Ser Ala Lys Thr His Asn Leu Asn Val Glu Tyr Asn

10

420 425 430

Ile Phe Glu Gly Val Glu Cys Arg Gly Ala Pro Ala Val Val Ile Ser

435 440 445

15

Gln Gly Arg Val Ala Leu Glu Asp Gly Lys Met Phe Val Thr Pro Gly

450 455 460

Ala Gly Arg Phe Val Pro Arg Lys Thr Phe Pro Asp Phe Val Tyr Lys

465 470 475 480

20

Arg Ile Lys Ala Arg Asn Arg Leu Ala Glu Ile His Gly Val Pro Arg

485 490 495

Gly Leu Tyr Asp Gly Pro Val His Glu Val Met Val Pro Ala Lys Pro

25

500 505 510

Gly Ser Gly Ala Pro Ala Arg Ala Ser Cys Pro Gly Lys Ile Ser Val

515 520 525

30

Pro Pro Val Arg Asn Leu His Gln Ser Gly Phe Ser Leu Ser Gly Ser

530 535 540

Gln Ala Asp Asp His Ile Ala Arg Arg Thr Ala Gln Lys Ile Met Ala

0996633-110901

545 550 555 560

Pro Pro Gly Gly Arg Ser Asn Ile Thr Ser Leu Ser

565 570

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<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: immunogenic
peptide

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<400> 11

Lys Glu Met Gly Thr Pro Leu Ala Asp Thr Pro Thr Arg Pro Val Thr

1 5 10 15

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Arg His Gly Gly

20

25

<210> 12

<211> 12

<212> PRT

<213> Artificial Sequence

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<220>

<223> Description of Artificial Sequence: immunogenic
peptide

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T0601T-22958660

<400> 12

Leu Glu Asp Gly Thr Leu His Val Thr Glu Gly Ser

1 5 10

5

<210> 13

<211> 16

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<212> PRT

<213> Artificial Sequence

<220>

**<223> Description of Artificial Sequence: immunogenic
peptide**

15

<400> 13

Ile Thr Gly Pro Glu Gly His Val Leu Ser Arg Pro Glu Glu Val Glu

1 5 10 15

20

<210> 14

<211> 15

25

<212> PRT

<213> Artificial Sequence

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**<223> Description of Artificial Sequence: immunogenic
peptide**

30

<400> 14

Leu Thr Ser Phe Glu Lys Trp His Glu Ala Ala Asp Thr Lys Ser

1 5 10 15

5 <210> 15
 <211> 13
 <212> PRT
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10 <220>
 <223> Description of Artificial Sequence: immunogenic
 peptide

15 <400> 15
 Glu His Asp Ser His Ala Gln Leu Arg Trp Arg Val Leu
 1 5 10

20 <210> 16
 <211> 25
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 <213> Artificial Sequence

25 <220>
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30 <400> 16
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<210> 17
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TOPOT-2399550

<212> DNA

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5 **<223> Description of Artificial Sequence: primer**

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attaccgcac catcctcaag gc 22

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<212> DNA

<213> Artificial Sequence

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20 **atcacccatc ccttactctt ctgg 24**

<210> 19

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<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: primer

30

<400> 19

cagaagaaaa agccagaaca gaccg 25

09986633-110901

<213> Artificial Sequence

<223> Description of Artificial Sequence: primer

cccctcccca taaactctct ttg

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ctggaaagtt cacaggctgg

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<223> Description of Artificial Sequence: primer

<400> 22

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25

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22

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<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: primer

<400> 24

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21

<210> 25

<211> 22

<212> DNA

<213> Artificial Sequence

09986633-11094
T060T-2298660

<220>

<223> Description of Artificial Sequence: primer

<400> 25

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<210> 26

<211> 17

10 **<212> DNA**

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<223> Description of Artificial Sequence: primer

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<400> 26

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20 **<210> 27**

<211> 19

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<213> Artificial Sequence

25 **<220>**

<223> Description of Artificial Sequence: primer

<400> 27

agtgccctcct ggtaactgg 19

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<212> DNA

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<223> Description of Artificial Sequence: primer

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<210> 29

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<213> Artificial Sequence

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<223> Description of Artificial Sequence: primer

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tgccatcttg acattgagga ggtcc

25

<210> 30

<211> 30

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: antisense

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cagacatgtg ataccagaag gtcattgcagt

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09986633-110901